

MatrikonOPC Server for Allen Bradley PLCs with ANC-100e using HMI feature on a Data Highway Plus network

This document provides information to set up MatrikonOPC Server for Allen Bradley PLCs running in a computer connected via Ethernet Network with an ANC-100e to communicate with a SLC5/04 or PLC5 processor on a Data Highway Plus Network using the HMI feature.

Note: Before proceeding, make sure

- ✓ ANC-120e Driver is installed (*Only if using ANC-120e*)
- ✓ Network Adapter is correctly configured to access ANC-120e or ANC-100e
- ✓ ANC-120e is connected to the computer and DH+ network or ANC-100e is connected to the same Ethernet network or directly to your computer, and to the DH+ network.

For this example:

ANC-100e IP address = 192.168.0.230
SLC5/04 DH+ node = 03

1. Turn ON the first row in the ANC-100e's "HMI" tab in the web interface
2. Enter an IP address that is not being used (keep in mind that it has to be in the same network the ANC-100e is) and enter the DH+ node of the device that you are connecting to
3. You can repeat steps 1 and 2 for each row to communicate with up to 5 DH+ devices if necessary, using a different IP address in each row
Click "Apply" and wait for the unit to reboot (5 seconds)



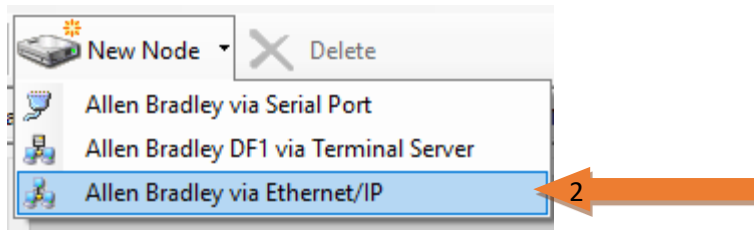
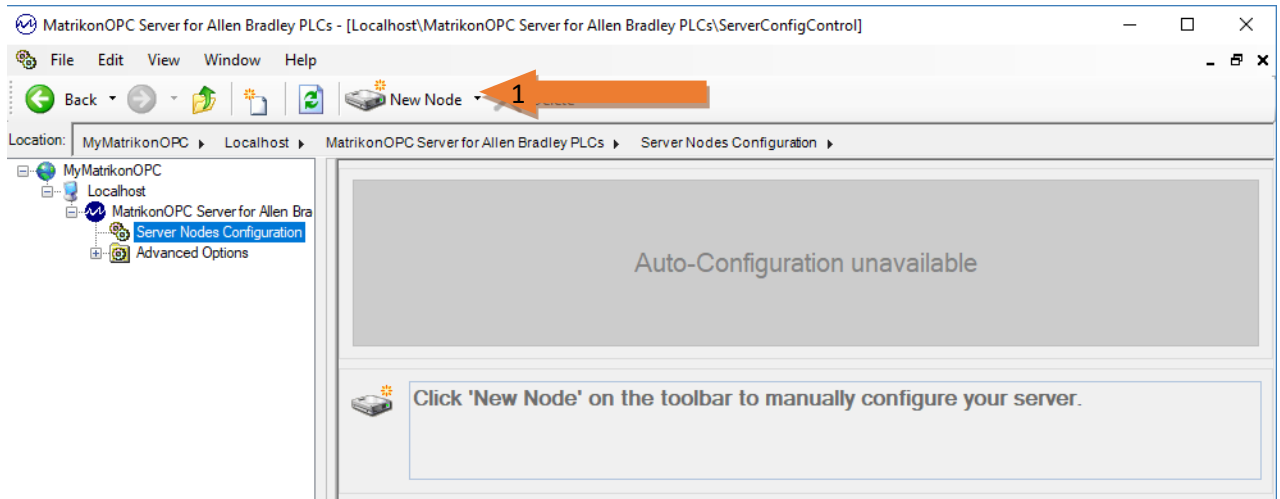
| | IP Address | DH+ Node |
|-----|---------------|----------|
| ON | 192.168.0.231 | 3 |
| ON | 0.0.0.0 | 0 |
| ON | 0.0.0.0 | 0 |
| OFF | 0.0.0.0 | 0 |
| OFF | 0.0.0.0 | 0 |

Apply

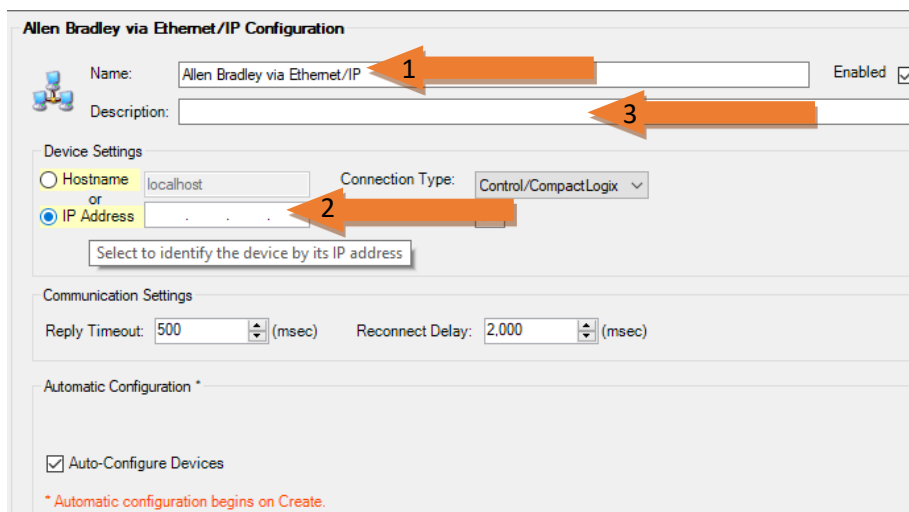
Automation Networks & Solutions LLC.
<http://www.automation-networks.com>

4. Open "MatrikonOPC Server for Allen Bradley PLCs" application

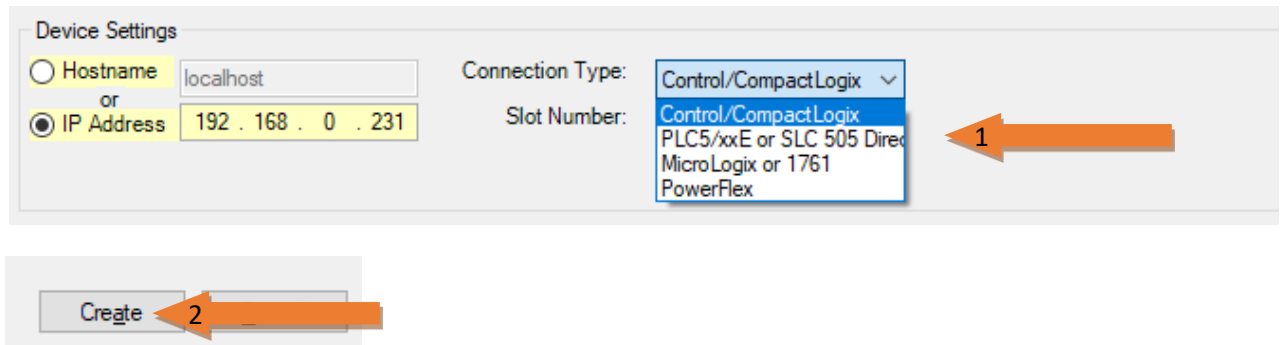
5. Click in “New Node icon” and select “Allen Bradley via Ethernet/IP”



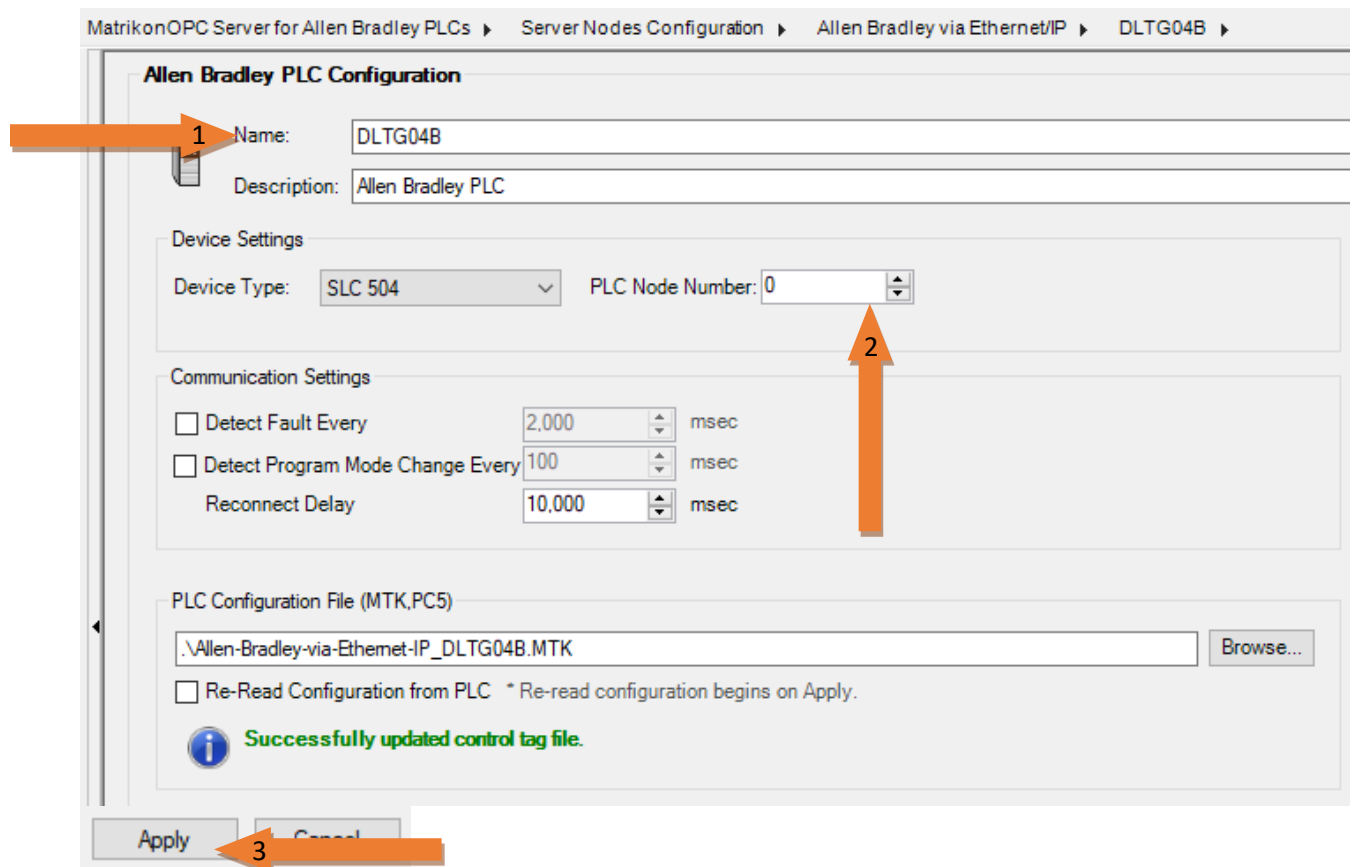
6. Enter a name for the new node (“Allen Bradley via Ethernet/IP” for our example) and enter the IP Address you wrote in the HMI tab web configuration of the ANC (“192.168.0.231” in our case). the description will be filled automatically once you create the node



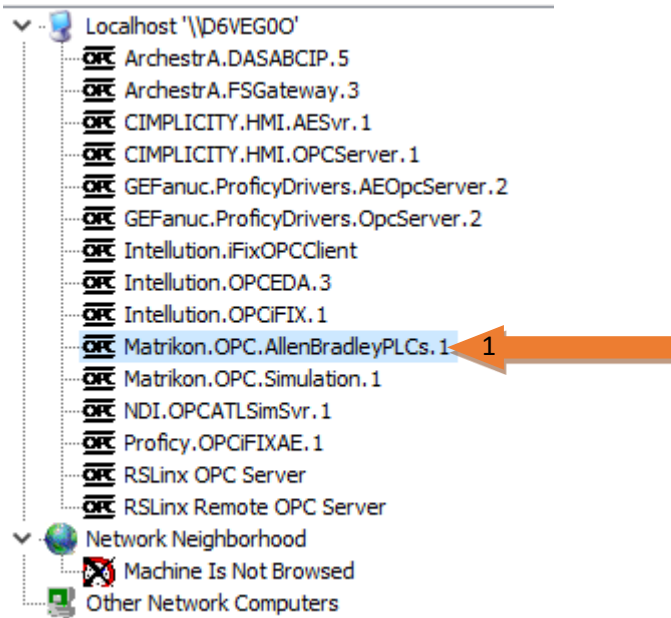
7. Select the *Connection Type...* We have a SLC 5/04 so we selected: “PLC5/xxE or SLC 505” and click the “Create” button



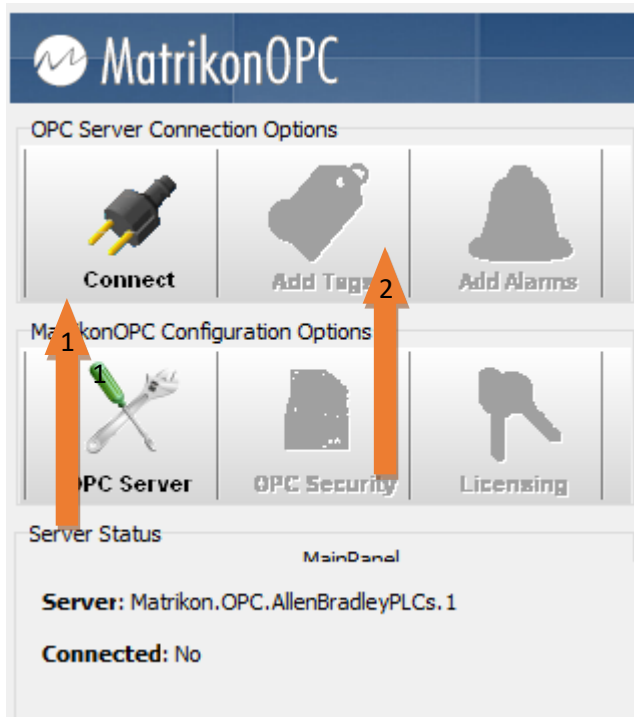
8. If the PLC has a name it will be filled automatically. Change the PLC node number to the one configured in the HMI tab web configuration ("3" in our case) and click "Apply"



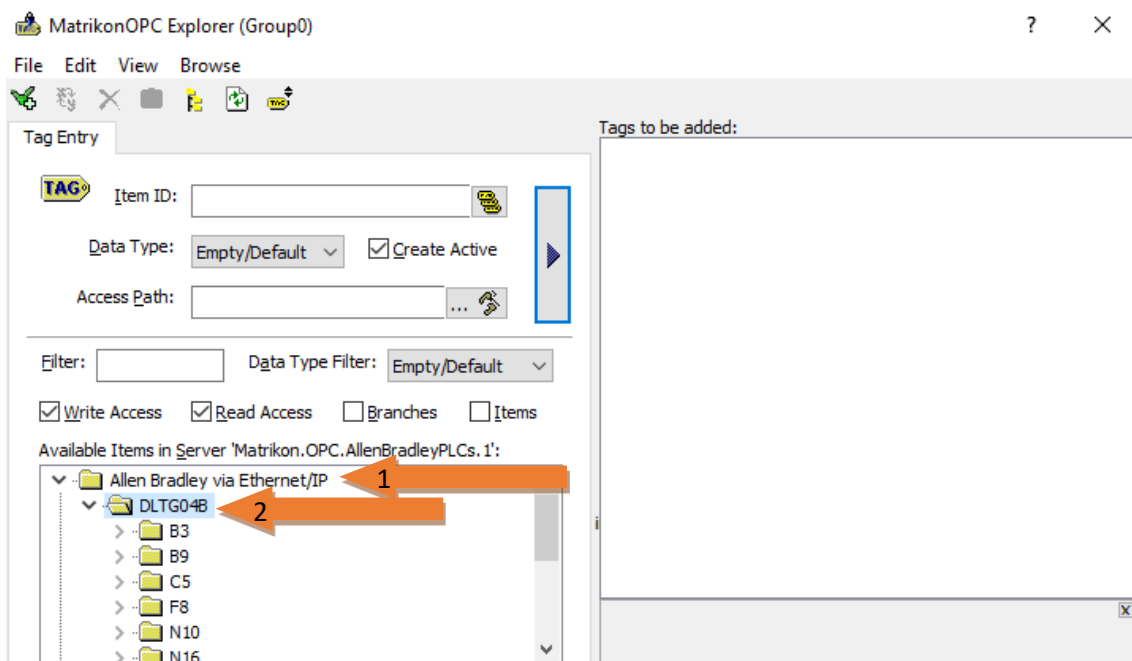
9. Open *MatrikonOPC Explorer* to connect to the OPC Server and start working with your PLC (*adding TAGS for example*). Search for the OPC Server Name



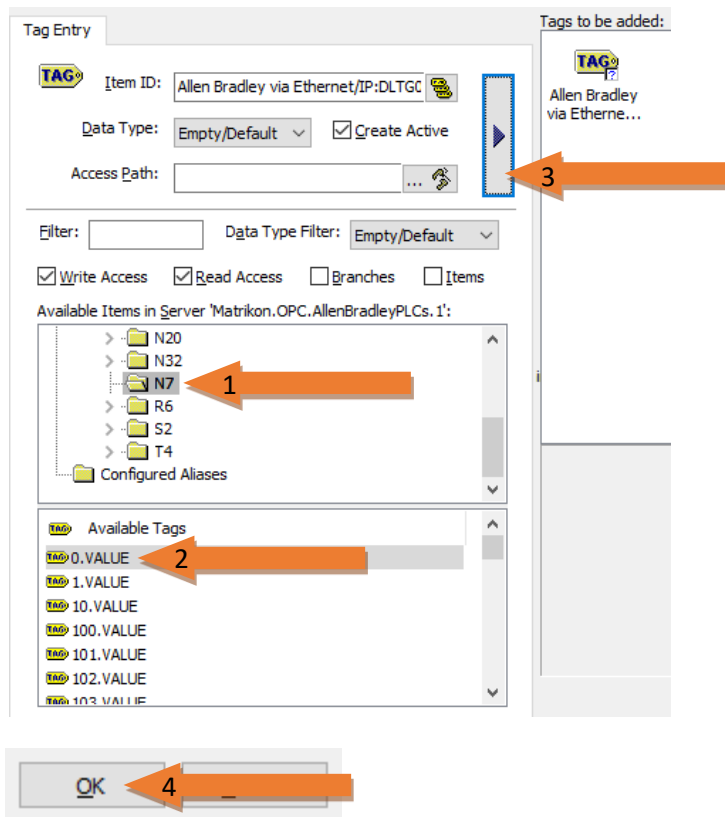
10. Select “Connect...” and then “Add Tags...”



11. In the new window select “Allen Bradley via Ethernet/IP” and search within the PLC (“DLTG04B”) for the TAG or TAGs you are going to work with. In our case is N7:0, and the value is 56.



12. Select the item “N7” and then select the tag “0.VALUE” and click on the arrow button to add the TAG. Click “OK” button.



13. If everything is correct you will see the value of the TAG. In our example “56”

| Contents of 'Group0' | | | | | |
|--|-------------|-------|--------------------|--------------|--------|
| Item ID | Access Path | Value | Quality | Timestamp | Status |
| Allen Bradley via Ethernet/IP:DLTGC4B:N7:0.VALUE | | 56 | Good, non-specific | 06/20/201... | Active |